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bgp.he.net

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March 2025 – INEX  
Dublin, Ireland

Walt Wollny, Director Interconnection Strategy  
Hurricane Electric AS6939

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## Who is Walt Wollny?

### Hurricane Electric AS6939 – 11 years

Director Interconnection Strategy – supporting the network to reach to over 34 countries and over 152 Internet Exchanges. Focus on Global connectivity.

### Amazon AS16509 – 4 years

Developed IP Transit and Peering on five continents.

Primary focus on Japan, Singapore, Hong Kong, India, Taiwan, Philippines, Australia.

Over 62 new CDN sites.

### Microsoft AS8075 – 13 years

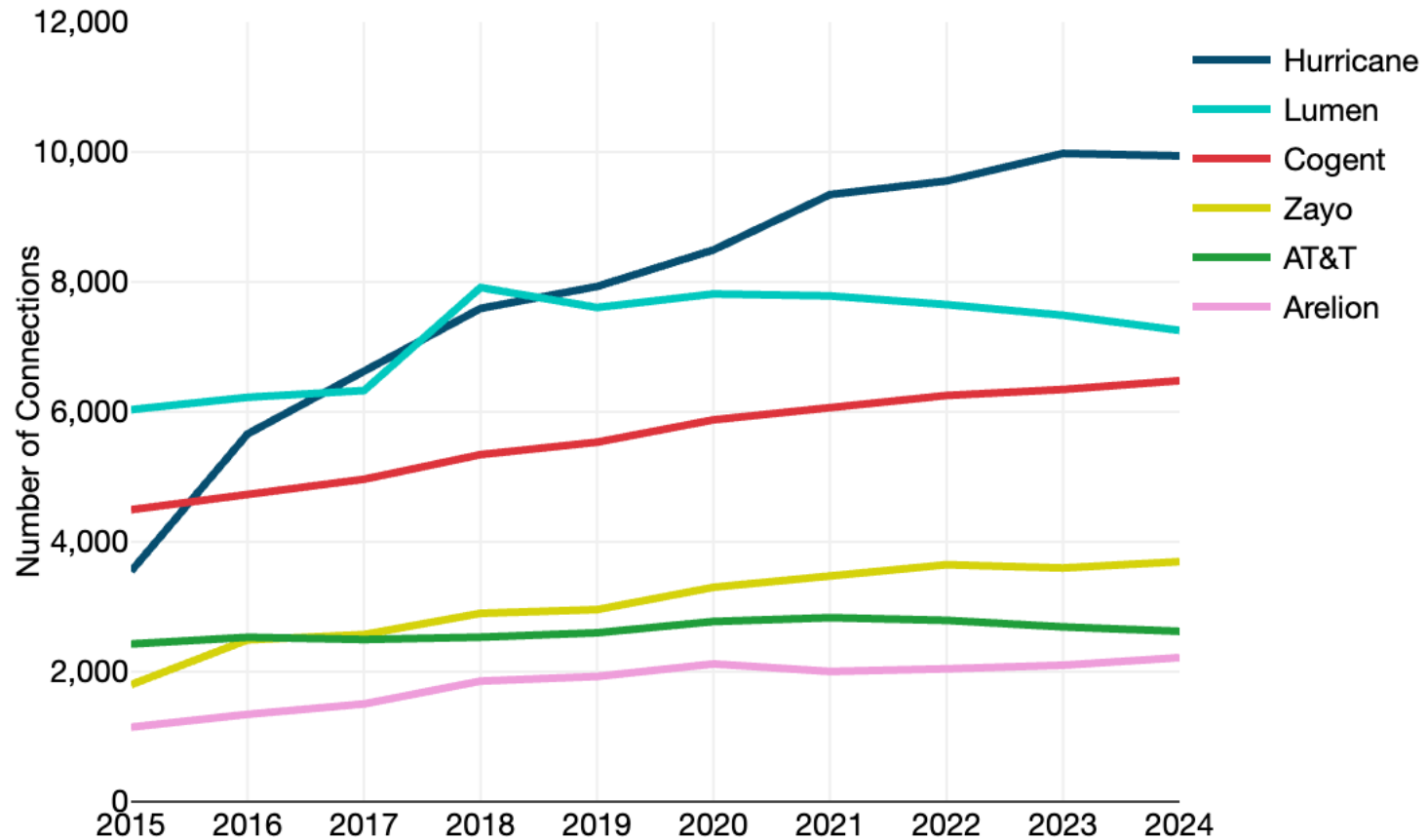
Developed IP Transit and Peering on four continents.

Primary focus on US, UE and South America.

28 years of Internet exchange experience



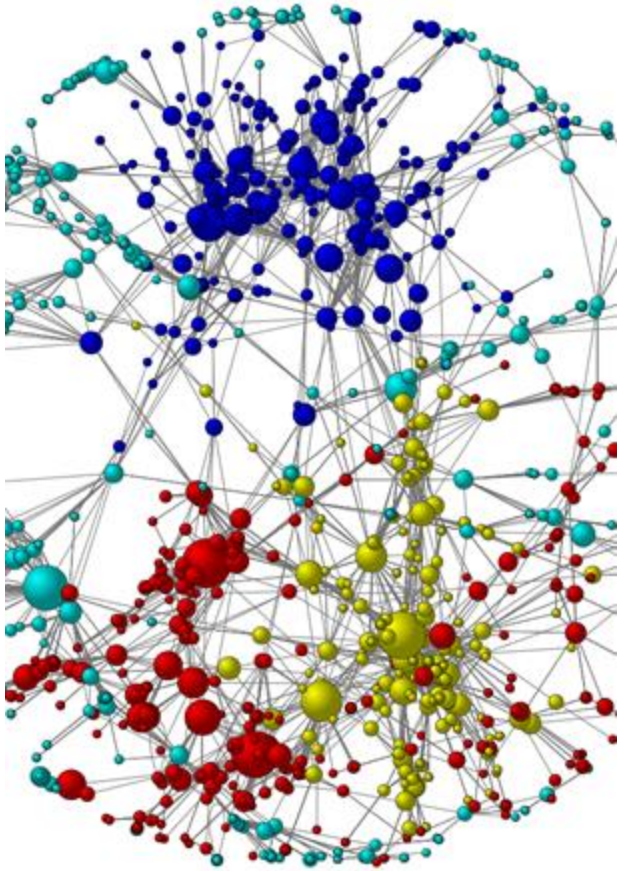
# Number of Connections for ISP 2024



<https://blog.telegeography.com/the-2024-internet-provider-connectivity-rankings-are-in>



## INTERNET



A network of “networks”  
(where “networks = ASNs”)

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# Key points before we begin

- Network ASN must be visible
- If it is not visible there will be no routing data
- Participate with public collectors via route-views, RIS etc
- BGP is the key so best path selection is used
- Data is independent of HE's production network
- Data is updated within few mins
  
- If you manage network that is not adequately represented, contact us and we will work with you to get your data incorporated. [support@he.net](mailto:support@he.net)

# Home Page



HURRICANE ELECTRIC  
INTERNET SERVICES

Search

**BGP Toolkit Home**

## Quick Links

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## Home

Welcome to the Hurricane Electric BGP Toolkit.

You are visiting from **220.86.114.11**



Announced as **220.80.0.0/13**



Your ISP is **AS4766** (Korea Telecom)



Updated 16 Mar 2017 14:01 PST © 2017 Hurricane Electric



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What's new in bgp.he.net?



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# Super Looking Glass

- . Capability to look for routes within last 5 mins
- . Routes fed by hundreds of public route collectors like RIPE RIS, Oregon Rviews etc with 3500+ neighbors, 1000+ unique ASNs
- . Ability to include or exclude routes with a ASN in the path
- . Ability to look at routes from specific neighbor of a public collector
- . Also, Includes bgp communities if available in the public collector



# Super Looking Glass

Super Looking Glass | [Terminal](#)

78.16.0.0/14

Perform Query!  Exact Match  Shorter  Longer  Bigger  Text  Exclude All ASNs  Select a neighbor to query directly

615 Paths observed BGP data is delayed up to 5 minutes

Neighbor	64.71.137.241 (AS6939) <small>Learned from: route-view3</small>
Prefix	78.16.0.0/14
AS Path	6939 2110
Origin	IGP
RPKI validation	<span style="color: green;">VALID</span> <small>At least one VRF matches the Route Prefix</small>
Last Updated	1/24/2025, 12:51:21 PM (7w04d09h)
Neighbor	89.21.210.85 (AS39120) <small>Learned from: route-view3</small>
Prefix	78.16.0.0/14
AS Path	39120 2110
Origin	IGP
RPKI validation	<span style="color: green;">VALID</span> <small>At least one VRF matches the Route Prefix</small>
Large Communities	39120:43760:1
Last Updated	2/20/2025, 9:57:41 PM (3w04d20h)
Neighbor	89.21.210.86 (AS39120) <small>Learned from: route-view3</small>
Prefix	78.16.0.0/14
AS Path	39120 2110
Origin	IGP
RPKI validation	<span style="color: green;">VALID</span> <small>At least one VRF matches the Route Prefix</small>
Large Communities	39120:43760:1
Last Updated	1/20/2025, 11:25:23 PM (8w00d18h)
Neighbor	94.101.60.146 (AS39120) <small>Learned from: route-view3</small>
Prefix	78.16.0.0/14
AS Path	39120 2110
Origin	IGP
RPKI validation	<span style="color: green;">VALID</span> <small>At least one VRF matches the Route Prefix</small>
Large Communities	39120:43760:1
Last Updated	1/20/2025, 11:25:24 PM (8w00d18h)



# 78.16.0.0/14 - with AS6939 in path + text output

Super Looking Glass Terminal

78.16.0.0/14

Perform Query!  Exact Match  Shorter  Longer  Brief  Text  Exclude 6939

60 Paths observed BGP data is delayed up to 5 minutes

- 1 Prefix: 78.16.0.0/14  
NEXT\_HOP: 64.71.137.241, Learned from Peer: 64.71.137.241 (6939 - Hurricane Electric LLC)  
PATH\_ORIGIN: IGP, RPKI: **VALID**  
AS\_PATH: 6939 2110  
6939 - HURRICANE, US  
2110 - AS-BTIRE BT Ireland was previously known as Esat Net, EUnet  
Source: route-views  
Last Updated: 3/8/2025, 4:06:53 PM (1w03d02h)
- 2 Prefix: 78.16.0.0/14  
NEXT\_HOP: 172.18.14.1, Learned from Peer: 172.18.14.1 (6939 - Hurricane Electric LLC)  
PATH\_ORIGIN: IGP, RPKI: **VALID**  
AS\_PATH: 6939 2110  
6939 - HURRICANE, US  
2110 - AS-BTIRE BT Ireland was previously known as Esat Net, EUnet  
Source: collector14.bgp.he.net  
Last Updated: 3/16/2025, 6:13:12 PM (0w02d00h)
- 3 Prefix: 78.16.0.0/14  
NEXT\_HOP: 172.18.14.2, Learned from Peer: 172.18.14.2 (6939 - Hurricane Electric LLC)  
PATH\_ORIGIN: IGP, RPKI: **VALID**  
AS\_PATH: 6939 2110  
6939 - HURRICANE, US  
2110 - AS-BTIRE BT Ireland was previously known as Esat Net, EUnet  
Source: collector14.bgp.he.net  
Last Updated: 3/4/2025, 8:25:32 AM (2w00d09h)
- 4 Prefix: 78.16.0.0/14  
NEXT\_HOP: 195.66.224.21, Learned from Peer: 195.66.224.21 (6939 - Hurricane Electric LLC)  
PATH\_ORIGIN: IGP, RPKI: **VALID**  
AS\_PATH: 6939 2110  
6939 - HURRICANE, US  
2110 - AS-BTIRE BT Ireland was previously known as Esat Net, EUnet  
Source: route-views.linx  
Last Updated: 2/14/2025, 6:09:32 AM (4w04d12h)
- 5 Prefix: 78.16.0.0/14  
NEXT\_HOP: 196.223.21.74, Learned from Peer: 196.223.21.74 (6939 - Hurricane Electric LLC)  
PATH\_ORIGIN: IGP, RPKI: **VALID**  
AS\_PATH: 6939 2110  
6939 - HURRICANE, US  
2110 - AS-BTIRE BT Ireland was previously known as Esat Net, EUnet  
Source: route-views.kixp  
Last Updated: 2/27/2025, 5:06:10 AM (2w05d13h)



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# Super Traceroute

- Capability to trace from thousand of RIPE Atlas probes, perfSONAR etc
- Trace source can be selected based on city, country or ASN.
- Supports both IPv4 and IPv6 lookups (IPv6 where probe is on a IPv6 network)

# Super Traceroute

Traceroute

Specify a target ip or domain name in the box below.

Select Target

he.net

Select Probe

dublin

Perform Query

Platform	IP	ASN	City	State	Country
PERFSONAR	63.33.90.46	16509	Dublin	Europe	IE
RIPE	134.226.81.15	1213	Dublin	Leinster	IE
RIPE	160.6.130.245	1213	Dublin	Leinster	IE
RIPE	86.40.1.113	5466	Dublin	Leinster	IE
RIPE	86.45.254.121	5466	Dublin	Leinster	IE
RIPE	95.44.44.235	5466	Dublin	Leinster	IE
RIPE	109.255.62.156	8030	Dublin	Leinster	IE
RIPE	20.238.82.3	8075	Dublin	Leinster	IE
RIPE	74.234.28.19	8075	Dublin	Leinster	IE
RIPE	34.245.11.208	16509	Dublin	Leinster	IE

Showing 1 to 10 of 12 entries

Previous 1 2 Next

Results will appear below

```
Traceroute from 109.255.62.156 to he.net
Using RPL, Probe 94393

RESOLVED he.net to 216.218.236.2
STARTED QUERY AT 2025/03/18 12:53:18 UTC

Fetching Measurement: 92319902
Traceroute from 109.255.62.156 to 216.218.236.2 (216.218.236.2):
  0 109.255.62.1 0.00ms 11.90ms 21.87ms
  1 200.168.8.1 3.96ms 2.91ms 2.527ms
  2 209.255.62.1 16.42ms 11.59ms 21.87ms
  3 209.255.255.1 11.457ms 18.63ms 11.96ms
  4 se-dublin-r13-ae-41-0.aerfa.net 184.116.238.118 14.56ms 13.927ms 13.57ms
  5 se-dublin-r13-ae-63-0.aerfa.net 184.116.134.174 11.67ms 11.76ms 13.82ms
  6 port-channel10.core2.ny01.he.net 138.184.197.190 12.46ms 12.46ms 12.36ms
  7 109.255.62.1 16.42ms 11.59ms 21.87ms
  8 * port-channel11.core3.ny04.he.net 184.185.64.141 72.76ms *
  9 port-channel9.core2.sjc2.he.net 184.184.199.211 132.75ms *
  10 * port-channel7.core2.pas1.he.net 184.184.199.204 139.827ms *
  11 port-channel6.core1.mtl1.he.net 172.17.62.163 132.567ms 134.76ms 136.63ms
  12 he.net (216.218.236.2) 132.11ms 132.46ms 129.82ms

Completed in 32.9ms
```



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# Real time updates on IRR, RPKI & propagation graphs

- bgp.he.net Prefix v4 and Prefix v6 page does real time check of IRR route objects and RPKI ROA check
- Check happens with seconds after the page loads
- Green tick (✔) when route object is valid, red tick (✘) when there is mismatch between origin in route object Vs origin as visible in the BGP table
- Green key (🔑) when RPKI ROA check is valid, red key when there is a mismatch in origin AS or prefix length in ROA Vs the BGP table
- Per prefix propagation graphs are available and close to real time

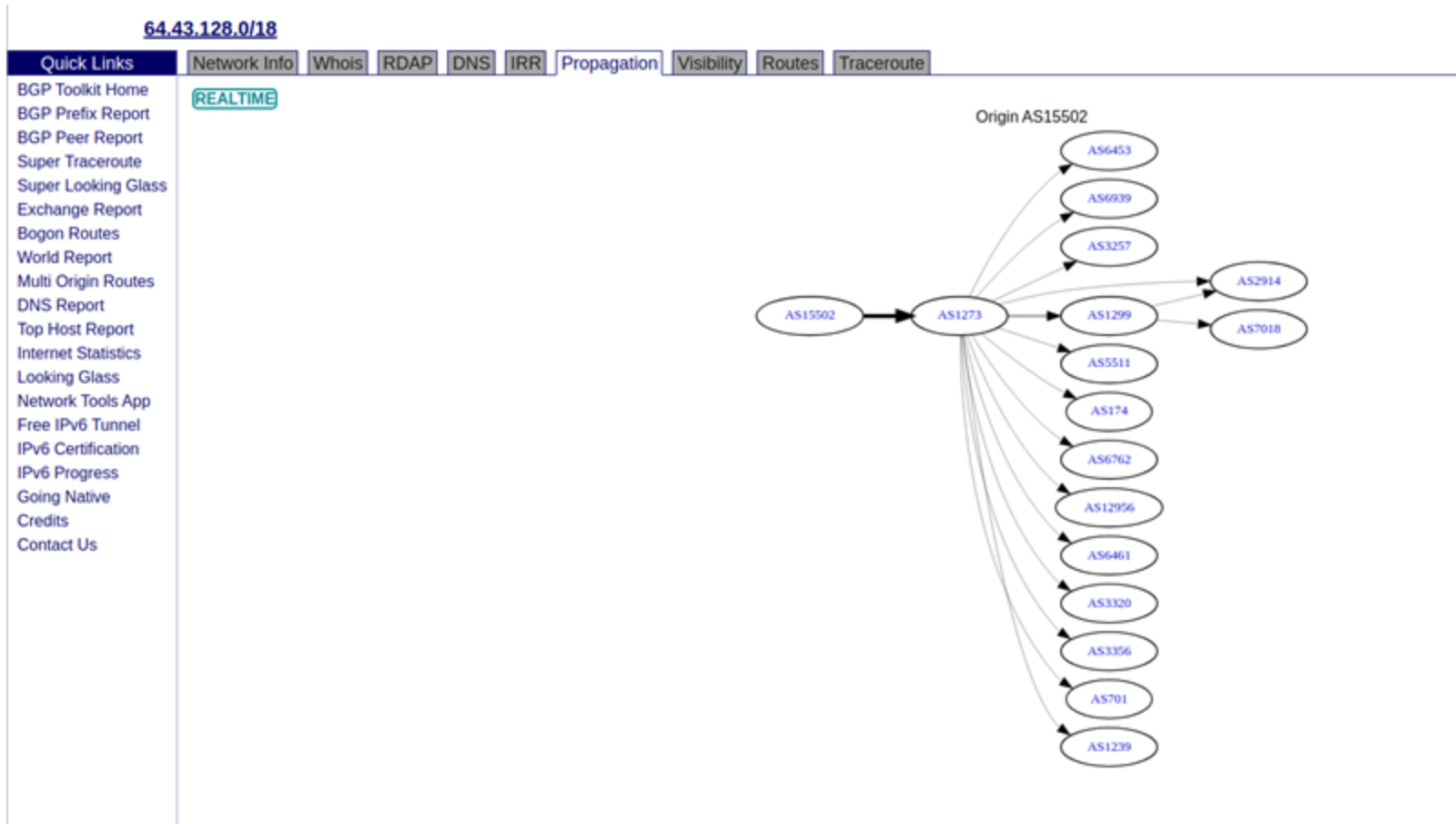
# Real time updates on IRR, RPKI & propagation graphs

## AS135343 Magic Particle Limited

Quick Links	AS Info	Graph v4	Graph v6	Prefixes v4	Prefixes v6	Peers v4	Peers v6	Whois	RDAP	IRR	Traceroute
BGP Toolkit Home											
BGP Prefix Report											
BGP Peer Report											
Super Traceroute											
Super Looking Glass											
Exchange Report											
Bogon Routes											
World Report											
Multi Origin Routes											
DNS Report											
Top Host Report											
Internet Statistics											
Looking Glass											
Network Tools App											
Free IPv6 Tunnel											
IPv6 Certification											
IPv6 Progress											
Going Native											
Credits											
Contact Us											
Showing 1-14 of 14											



# Real time updates on IRR, RPKI & propagation graphs



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# New metric: Visibility

- Visibility check for each prefix across 600+ full route data
- Marks down routes which have low global visibility
- Could be result of IRR/RPKI mismatch or intentional limiting of announcement








































































# New metric: Visibility

## AS15502 Vodafone Ireland Limited

### Quick Links

[AS Info](#)
[Graph v4](#)
[Prefixes v4](#)
[Peers v4](#)
[Whois](#)
[RDAP](#)
[IRR](#)
[IX](#)
[Traceroute](#)

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[Looking Glass](#)  
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[Free IPv6 Tunnel](#)  
[IPv6 Certification](#)  
[IPv6 Progress](#)  
[Going Native](#)  
[Credits](#)  
[Contact Us](#)

Prefix		Description	Visibility
5.253.124.0/22	 	Vodafone Ireland Limited	 100% 637/637
37.110.216.0/21	 	Vodafone Ireland Limited	 100% 637/637
51.37.0.0/16	 	Vodafone Ireland Limited	 100% 637/637
51.37.0.0/17	 	Vodafone Ireland Limited	 100% 637/637
51.37.128.0/17	 	Vodafone Ireland Limited	 100% 637/637
64.43.0.0/18	 	RIPE Network Coordination Centre	 100% 637/637
64.43.0.0/20	 	RIPE Network Coordination Centre	 8% 52/637
64.43.0.0/21	 	Vodafone Ireland	 100% 637/637
64.43.0.0/22	 	Vodafone Ireland	 8% 52/637
64.43.4.0/22	 	EIRCELL-ASNMT	 8% 52/637
64.43.8.0/21	 	Vodafone Ireland	 100% 637/637
64.43.8.0/22	 	EIRCELL-ASNMT	 8% 52/637
64.43.12.0/22	 	EIRCELL-ASNMT	 8% 52/637
64.43.16.0/20	 	Vodafone Ireland	 100% 637/637
64.43.16.0/21	 	RIPE Network Coordination Centre	 8% 52/637
64.43.24.0/22	 	EIRCELL-ASNMT	 8% 52/637
64.43.28.0/22	 	EIRCELL-ASNMT	 8% 52/637
64.43.32.0/20	 	Vodafone Ireland	 100% 637/637
64.43.32.0/21	 	Vodafone Ireland Limited	 8% 52/637
64.43.40.0/22	 	Vodafone Ireland	 8% 52/637
64.43.44.0/22	 	Vodafone Ireland	 8% 52/637
64.43.48.0/20	 	Infra	 8% 52/637
64.43.49.0/24	 		 100% 636/637



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# Lookup for 64.43.0.0/20

- 64.43.0.0/20 - visible only in 52 out of 637 known full routes
- Prefix -> Propagation shows “*The prefix 64.43.0.0/20 is not visible to any of the major Internet backbones.*”
- Visibility tab shows route is visible only by certain ASNs in certain collectors

# Lookup for 64.43.0.0/20

64.43.0.0/20

Quick Links: [Network Info](#) [Whois](#) [SDAP](#) [DNS](#) [BGP](#) [Propagation](#) [Visibility](#) [Routes](#) [Traceroute](#)

**REALTIME**

The prefix 64.43.0.0/20 is not visible to any of the major Internet backbones.

Quick Links:  
 BGP Toolkit Home  
 BGP Prefix Report  
 BGP Peer Report  
 Super Traceroute  
 Super Linking Glass  
 Exchange Report  
 Began Routes  
 World Report  
 Multi Origin Routes  
 DNS Report  
 Top Host Report  
 Internet Statistics  
 Linking Glass  
 Network Tools App  
 Free IPv6 Tunnel  
 IPv6 Certification  
 IPv6 Progress  
 Going Native  
 Credits  
 Contact Us

64.43.0.0/20

Quick Links: [Network Info](#) [Whois](#) [SDAP](#) [DNS](#) [BGP](#) [Propagation](#) [Visibility](#) [Routes](#) [Traceroute](#)

**REALTIME**

Visibility: 0% (0/ out of 875 Full Views)

Collector	Peer IP	Peer ASN	Max Prefix	Origin ASN
route-view.chicago	208.125.137.47	3356AS	via	via
route-view.chicago	208.125.137.100	14620	via	via
route-view.chicago	208.125.137.200	14620	via	via
route-view.chicago	208.125.137.60	18632	via	via
route-view.chicago	208.125.136.5	17500	via	via
route-view.chicago	208.125.136.87	812	via	via
route-view.chicago	208.125.136.220	53029	via	via
route-view.chicago	208.125.137.238	20163	via	via
route-view.chicago	208.125.137.50	49544	via	via
route-view.chicago	208.125.136.42	18624	via	via
route-view.chicago	208.125.136.90	17201	via	via
route-view.chicago	208.125.136.133	18633	via	via
route-view.chicago	208.125.136.18	18632	via	via
route-view.chicago	208.125.136.58	293	via	via
route-view.chicago	208.125.137.35	8328	via	via
collector4.sgi.net.in	172.16.14.2	8109	via	via
collector4.sgi.net.in	172.16.14.3	8109	via	via
route-view.napathica	136.60.0.148	12345	via	via
route-view.napathica	136.60.0.42	14632	via	via
route-view.napathica	136.60.0.26	27106	via	via
route-view.napathica	136.60.0.128	32953	via	via
route-view.napathica	136.60.0.176	27172	via	via
route-view.napathica	136.60.0.185	37467	via	via
route-view.napathica	136.60.0.210	39494	via	via
route-view.napathica	136.60.0.9	49544	via	via
route-view.napathica	136.60.0.142	27171	via	via
route-view.napathica	136.60.0.178	27162	via	via
route-view.napathica	136.60.0.60	37466	via	via
route-view.napathica	136.60.0.214	12345	via	via
route-view.napathica	136.60.0.123	32952	via	via
route-view.napathica	136.60.0.162	34011	via	via
route-view.napathica	136.60.0.146	32948	via	via
route-view.napathica	136.60.0.212	32944	via	via
route-view.napathica	136.60.0.206	18624	via	via
route-view.napathica	136.60.0.134	32954	via	via
route-view2.napathica	187.16.221.228	49544	via	via
route-view2.napathica	187.16.222.25	18624	via	via
route-view2.napathica	187.16.222.223	26206	via	via
route-view2.napathica	187.16.217.21	26219	via	via
route-view2.napathica	187.16.218.138	26216	via	via
route-view2.napathica	187.16.220.225	32978	via	via
route-view2.napathica	187.16.221.198	37466	via	via
route-view2.napathica	187.16.222.228	18624	via	via
route-view2.napathica	187.16.219.247	26241	via	via
route-view2.napathica	187.16.218.83	26426	via	via
route-view2.napathica	187.16.219.28	18627	via	via
route-view2.napathica	187.16.218.232	32129	via	via
route-view2.napathica	187.16.222.106	26479	via	via
route-view2.napathica	187.16.222.108	262161	via	via
route-view2.napathica	187.16.219.29	41832	via	via
route-view2.napathica	187.16.225.32	8808	via	via
route-view2.napathica	187.16.224.83	18628	via	18622
route-view2.napathica	187.16.224.82	18627	via	18622
route-view2.napathica	187.16.220.18	27172	via	via
route-view2.napathica	187.16.221.183	12345	via	via
route-view2.napathica	187.16.225.49	42187	via	18622
route-view2.napathica	187.16.224.187	34011	via	via
route-view2.napathica	187.16.227.148	14620	via	via
route-view2.napathica	187.16.218	8112	via	via



# Lookup for 64.43.0.0/20

The screenshot shows a network routing tool interface with a sidebar on the left containing navigation links like 'Quick Links', 'BGP Tools Home', 'BGP Profile Report', etc. The main content area is titled 'Super Looking Glass' and displays the results for a BGP lookup of 64.43.0.0/20. It indicates that 52 paths were observed. The results are listed in a numbered format (1-5), each showing the prefix, next hop, path, and a list of communities. Path 1 is the most prominent, showing a path through ASes 99126 and 15662, with a large number of communities. Paths 2, 3, 4, and 5 show alternative routes from different providers like Cogent and Level3.

```
52 Paths observed

1 Prefix: 64.43.0.0/20
  NEXT_HOP: 99.21.218.86, Learned From Peer: 99.21.218.86 (99126 - ISP services in Italy)
  PATH: 99126 15662
  AS_PATH: 99126 15662
  99126 - COMMERCEAS ISP services in Italy, IT
  15662 - VODAFONE IRELAND ASN, IE
  COMMUNITIES: 0:714 0:1213 0:0009 0:0075 0:0062 0:13237 0:13236 0:34246 0:45073 0:42478
  0:714 - No export For AS714
  0:1213 - No export For AS1213
  0:0009 - No export For AS0009
  0:0075 - No export For AS0075
  0:0062 - No export For AS0062
  0:13237 - No export For AS13237
  0:13236 - No export For AS13236
  0:34246 - No export For AS34246
  0:45073 - No export For AS45073
  0:42478 - No export For AS42478
  LARGE_COMMUNITIES: 99126:43768:1
  Source: route-view3
  Last updated: 5/28/2025, 9:57:48 PM (Dubai135)

2 Prefix: 64.43.0.0/20
  NEXT_HOP: 99.21.218.86, Learned From Peer: 99.21.218.86 (99126 - ISP services in Italy)
  PATH: 99126 15662
  AS_PATH: 99126 15662
  99126 - COMMERCEAS ISP services in Italy, IT
  15662 - VODAFONE IRELAND ASN, IE
  COMMUNITIES: 0:714 0:1213 0:0009 0:0075 0:0062 0:13237 0:13236 0:34246 0:45073 0:42478
  0:714 - No export For AS714
  0:1213 - No export For AS1213
  0:0009 - No export For AS0009
  0:0075 - No export For AS0075
  0:0062 - No export For AS0062
  0:13237 - No export For AS13237
  0:13236 - No export For AS13236
  0:34246 - No export For AS34246
  0:45073 - No export For AS45073
  0:42478 - No export For AS42478
  LARGE_COMMUNITIES: 99126:43768:1
  Source: route-view3
  Last updated: 5/28/2025, 11:25:22 PM (Amsterdam)

3 Prefix: 64.43.0.0/20
  NEXT_HOP: 94.101.68.146, Learned From Peer: 94.101.68.146 (39128 - ISP services in Italy)
  PATH: 39128 15662
  AS_PATH: 39128 15662
  39128 - COMMERCEAS ISP services in Italy, IT
  15662 - VODAFONE IRELAND ASN, IE
  COMMUNITIES: 0:714 0:1213 0:0009 0:0075 0:0062 0:13237 0:13236 0:34246 0:45073 0:42478
  0:714 - No export For AS714
  0:1213 - No export For AS1213
  0:0009 - No export For AS0009
  0:0075 - No export For AS0075
  0:0062 - No export For AS0062
  0:13237 - No export For AS13237
  0:13236 - No export For AS13236
  0:34246 - No export For AS34246
  0:45073 - No export For AS45073
  0:42478 - No export For AS42478
  LARGE_COMMUNITIES: 39128:43768:1
  Source: route-view3
  Last updated: 5/28/2025, 11:25:24 PM (Amsterdam)

4 Prefix: 64.43.0.0/20
  NEXT_HOP: 193.203.0.31, Learned From Peer: 193.203.0.31 (13237 - subNetworks Ltd)
  PATH: 13237 15662
  AS_PATH: 13237 15662
  13237 - LAMBERTAS European Backbone of AS13237, DE
  15662 - VODAFONE IRELAND ASN, IE
  COMMUNITIES: 0:714 0:1213 0:0009 0:0075 0:0062 0:13237 0:13236 0:34246 0:45073 0:42478
  0:714 - No export For AS714
  0:1213 - No export For AS1213
  0:0009 - No export For AS0009
  0:0075 - No export For AS0075
  0:0062 - No export For AS0062
  0:13237 - No export For AS13237
  0:13236 - No export For AS13236
  0:34246 - No export For AS34246
  0:45073 - No export For AS45073
  0:42478 - No export For AS42478
  LARGE_COMMUNITIES: 13237:43768:1
  Source: route-view3
  Last updated: 5/28/2025, 11:25:24 PM (Amsterdam)

5 Prefix: 64.43.0.0/20
  NEXT_HOP: 193.66.224.81, Learned From Peer: 193.66.224.81 (1828 - British Telecom Ltd)
  PATH: 1828 15662
  AS_PATH: 1828 15662
  1828 - BTNL, GB
  15662 - VODAFONE IRELAND ASN, IE
  COMMUNITIES: 1828:29 1828:23382
  Source: r1102-1102-net
  Last updated: 5/22/2025, 10:06:54 AM (Amsterdam)
```



# [http://bgp.he.net/AS12779#\\_asinfo](http://bgp.he.net/AS12779#_asinfo)

AS Info

Graph v4

Graph v6

Prefixes v4

Prefixes v6

Peers v4

Peers v6

Whois

RDAP

IRR

IX

Traceroute

Company Website:  
Company Looking Glass:

<http://www.itgate.it>  
<https://lg.itgate.net>

Country of Origin:

Italy



Internet Exchanges: 10

Prefixes Originated (all): 26  
Prefixes Originated (v4): 21  
Prefixes Originated (v6): 5

Prefixes Announced (all): 388  
Prefixes Announced (v4): 356  
Prefixes Announced (v6): 32

RPKI Originated Valid (all): 20  
RPKI Originated Valid (v4): 15  
RPKI Originated Valid (v6): 5

RPKI Originated Invalid (all): 0  
RPKI Originated Invalid (v4): 0  
RPKI Originated Invalid (v6): 0

BGP Peers Observed (all): 1,735  
BGP Peers Observed (v4): 1,690  
BGP Peers Observed (v6): 1,294

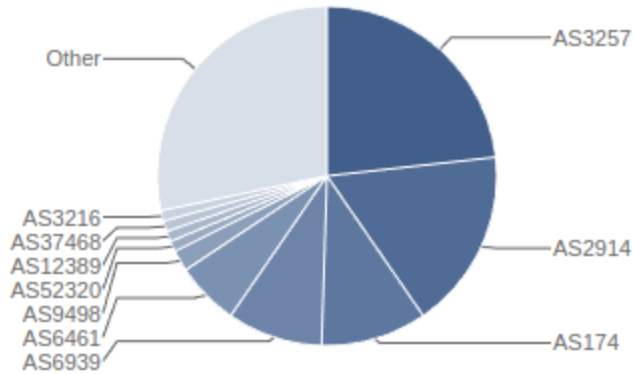
IPs Originated (v4): 45,824  
AS Paths Observed (v4): 147,890  
AS Paths Observed (v6): 56,588

Average AS Path Length (all): 4.233  
Average AS Path Length (v4): 4.239  
Average AS Path Length (v6): 4.218

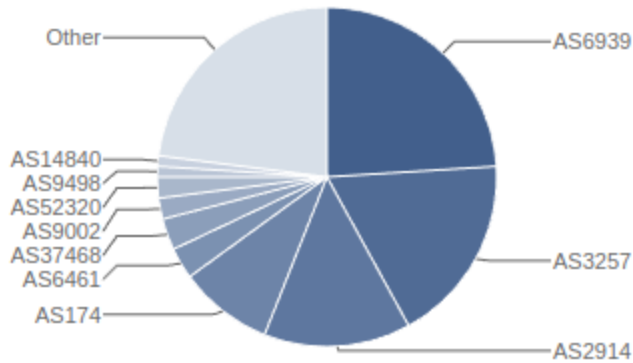


[http://bgp.he.net/AS12779#\\_asinfo](http://bgp.he.net/AS12779#_asinfo)

AS12779 IPv4 Peers



AS12779 IPv6 Peers

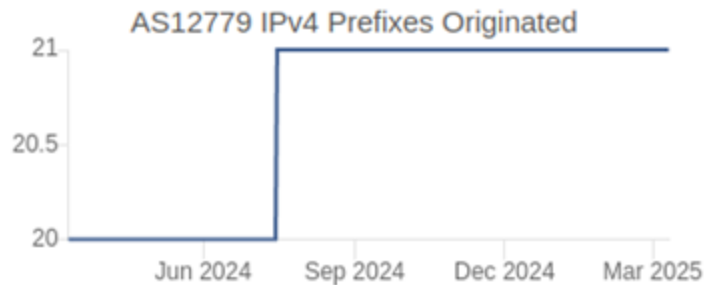


ASN	Name
<a href="#">AS3257</a>	<a href="#">GTT Communications Inc.</a>
<a href="#">AS2914</a>	<a href="#">NTT America, Inc.</a>
<a href="#">AS174</a>	<a href="#">Cogent Communications</a>
<a href="#">AS6939</a>	<a href="#">Hurricane Electric LLC</a>
<a href="#">AS6461</a>	<a href="#">Zayo Bandwidth</a>
<a href="#">AS9498</a>	<a href="#">Bharti Airtel Limited</a>
<a href="#">AS52320</a>	<a href="#">GlobeNet Cabos Submarinos Colombia, S.A.S.</a>
<a href="#">AS12389</a>	<a href="#">PJSC Rostelecom</a>
<a href="#">AS37468</a>	<a href="#">Angola Cables</a>
<a href="#">AS3216</a>	<a href="#">PJSC "Vimpelcom"</a>

ASN	Name
<a href="#">AS6939</a>	<a href="#">Hurricane Electric LLC</a>
<a href="#">AS3257</a>	<a href="#">GTT Communications Inc.</a>
<a href="#">AS2914</a>	<a href="#">NTT America, Inc.</a>
<a href="#">AS174</a>	<a href="#">Cogent Communications</a>
<a href="#">AS6461</a>	<a href="#">Zayo Bandwidth</a>
<a href="#">AS37468</a>	<a href="#">Angola Cables</a>
<a href="#">AS9002</a>	<a href="#">RETN Limited</a>
<a href="#">AS52320</a>	<a href="#">GlobeNet Cabos Submarinos Colombia, S.A.S.</a>
<a href="#">AS9498</a>	<a href="#">Bharti Airtel Limited</a>
<a href="#">AS14840</a>	<a href="#">BR.Digital Provider</a>



[http://bgp.he.net/AS12779#\\_asinfo](http://bgp.he.net/AS12779#_asinfo)



# Route propagation is to the following networks:

<b>Company</b>	<b>ASN</b>	<b>Company</b>	<b>ASN</b>
Hurricane Electric	6939	NTT	2914
Arelion	1299	Orange	5511
AT&T	7018	PCCW	3491
Cogent	174	Tata Comm	6453
DTAG	3320	Telecom Italia	6762
GTT	3257	Telxius	12956
Liberty Global	6830	Verizon	701
Lumen	3356	Zayo	6461

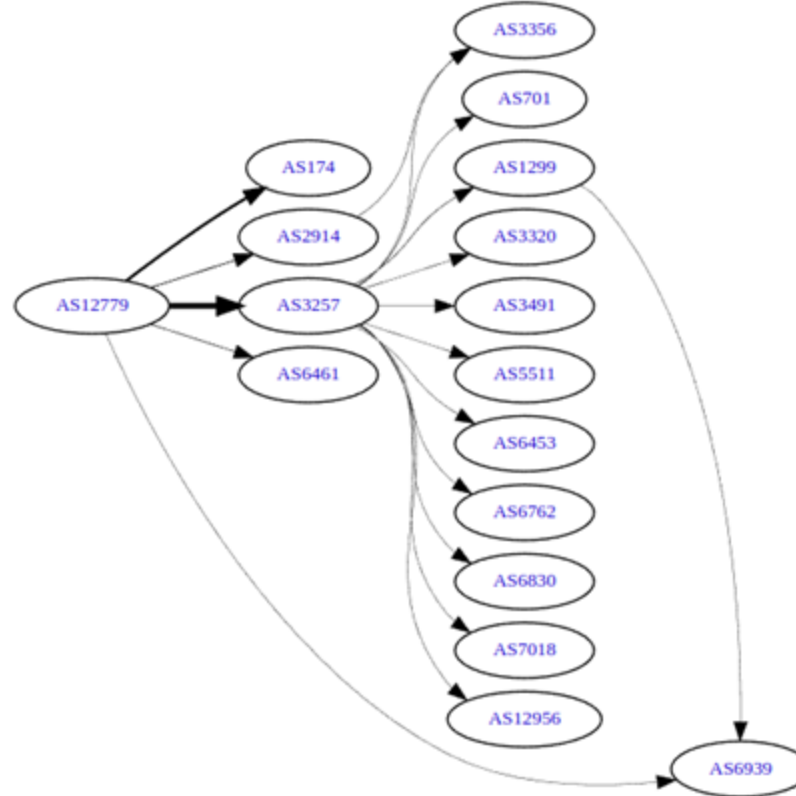




[http://bgp.he.net/AS12779#\\_graph4](http://bgp.he.net/AS12779#_graph4)

AS Info Graph v4 Graph v6 Prefixes v4 Prefixes v6 Peers v4 Peers v6 Whois RDAP IRR IX Traceroute

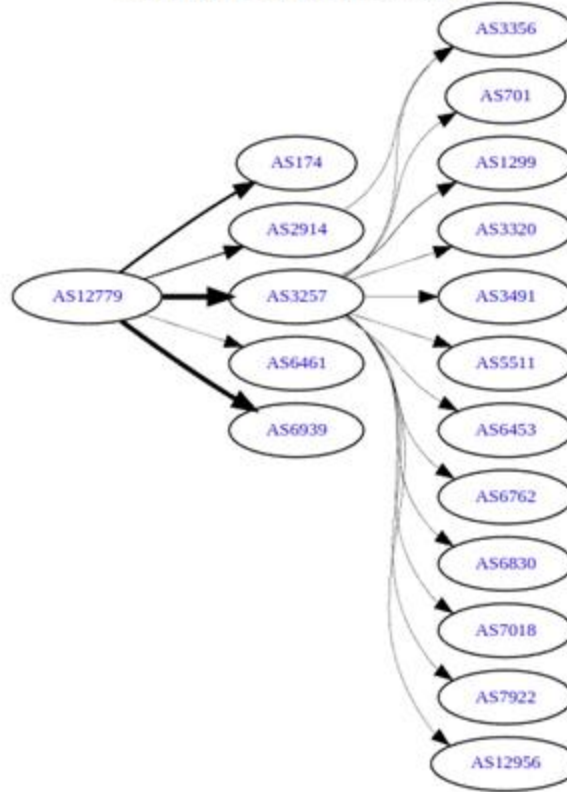
AS12779 IPv4 Route Propagation



[http://bgp.he.net/AS12779#\\_graph6](http://bgp.he.net/AS12779#_graph6)

AS Info Graph v4 Graph v6 Prefixes v4 Prefixes v6 Peers v4 Peers v6 Whois RDAP IRR IX Traceroute

AS12779 IPv6 Route Propagation



# http://bgp.he.net/AS12779#\_prefixes
















AS Info Graph v4 Graph v6 Prefixes v4 Prefixes v6 Peers v4 Peers v6 Whois RDAP IRR IX Traceroute

Prefix		Description	Visibility
5.104.26.0/23		ATCALL SRL	100% 643/643
5.104.28.0/23		ATCALL SRL	100% 643/643
5.104.30.0/24		ATCALL SRL	100% 643/643
77.74.16.0/21		MOVIMATICA Srl	100% 643/643
86.105.14.0/24		VHosting Solution srl	100% 643/643
89.31.200.0/21		IT.Gate S.p.A.	100% 643/643
91.245.234.0/24		VHosting Solution srl	100% 643/643
93.191.240.0/21		EUROLOGON-MNT	100% 643/643
176.110.111.0/24		WhiteReady S.r.l. Societa' Benefit	100% 643/643
185.59.80.0/22		IT.Gate S.p.A.	100% 643/643
185.59.80.255/32			0% 0/643
185.97.232.0/22		Eurologon Srl	100% 643/643
185.128.76.0/23		CITTA' STUDI S.P.A.	100% 643/643
185.141.230.0/24		Fida Informatica S.r.l.	100% 643/643
185.141.231.0/24		Fida Informatica S.r.l.	100% 643/643
185.228.205.0/24		Atlante Informatica S.R.L.	100% 643/643
194.28.116.0/22		DOCTYPE SRL	100% 643/643
195.74.81.0/24		En.AIP Piemonte	100% 643/643
195.238.235.0/24		ALFA DI ADB LUPOTTO & ASSOCIATI SOCIETA' DI CONSULENZA FINANZIARIA SPA BREVEMENTE ALFA SCF SPA	100% 643/643
212.110.32.0/19		IT.Gate S.p.A.	100% 643/643
213.212.128.0/18		IT.Gate S.p.A.	100% 643/643
213.254.0.0/19		IT.Gate S.p.A.	100% 642/643
213.254.31.255/32			0% 0/643

Showing 1-23 of 23





















# http://bgp.he.net/AS12779#\_prefixes6

AS Info Graph v4 Graph v6 Prefixes v4 Prefixes v6 Peers v4 Peers v6 Whois RDAP IRR IX Traceroute

Prefix		Description	Visibility
2001:1418::/29	 	IT.Gate S.p.A.	 100% 626/628
2a02:c480::/32	 	DOMINO S.R.L. SOCIETA' BENEFIT	 100% 628/628
2a0c:79c0:2::/48	 	VHosting Solution srl	 100% 628/628
2a0c:79c0:4::/48	 	VHosting Solution srl	 100% 628/628
2a10:e140::/32	 	WhiteReady S.r.l. Societa' Benefit	 99% 623/628

Showing 1-5 of 5

[http://bgp.he.net/AS12779#\\_peers](http://bgp.he.net/AS12779#_peers)

Rank	Description		IPv6	Peer
1	GTT Communications Inc.		X	<a href="#">AS3257</a>
2	NTT America, Inc.		X	<a href="#">AS2914</a>
3	Cogent Communications		X	<a href="#">AS174</a>
4	Hurricane Electric LLC		X	<a href="#">AS6939</a>
5	Zayo Bandwidth		X	<a href="#">AS6461</a>
6	Bharti Airtel Limited		X	<a href="#">AS9498</a>
7	GlobeNet Cabos Submarinos Colombia, S.A.S.		X	<a href="#">AS52320</a>
8	PJSC Rostelecom		X	<a href="#">AS12389</a>
9	Angola Cables		X	<a href="#">AS37468</a>
10	PJSC "Vimpelcom"		X	<a href="#">AS3216</a>
11	PJSC MegaFon		X	<a href="#">AS31133</a>
12	COLT Technology Services Group Limited		X	<a href="#">AS8220</a>
13	CJSC RASCOM		X	<a href="#">AS20764</a>
14	BR.Digital Provider		X	<a href="#">AS14840</a>
15	CORE-BACKBONE		X	<a href="#">AS33891</a>
16	Joint Stock Company TransTeleCom		X	<a href="#">AS20485</a>
17	Cloudflare, Inc.		X	<a href="#">AS13335</a>
18	Akamai Technologies, Inc.		X	<a href="#">AS32787</a>
19	China Mobile International Limited		X	<a href="#">AS58453</a>
20	Reliance Jio Infocomm Pte Ltd Singapore		X	<a href="#">AS64049</a>
21	MTS PJSC		X	<a href="#">AS8359</a>
22	INETCOM CARRIER LLC		X	<a href="#">AS35598</a>
23	SEACOM Limited		X	<a href="#">AS37100</a>
24	SG.GS		X	<a href="#">AS24482</a>
25	ELETRONET S.A.		X	<a href="#">AS267613</a>

[http://bgp.he.net/AS12779#\\_peers6](http://bgp.he.net/AS12779#_peers6)

Rank	Description	IPv4	Peer
1	Hurricane Electric LLC	 X	<a href="#">AS6939</a>
2	GTT Communications Inc.	 X	<a href="#">AS3257</a>
3	NTT America, Inc.	 X	<a href="#">AS2914</a>
4	Cogent Communications	 X	<a href="#">AS174</a>
5	Zayo Bandwidth	 X	<a href="#">AS6461</a>
6	Angola Cables	 X	<a href="#">AS37468</a>
7	RETN Limited	 X	<a href="#">AS9002</a>
8	GlobeNet Cabos Submarinos Colombia, S.A.S.	 X	<a href="#">AS52320</a>
9	Bharti Airtel Limited	 X	<a href="#">AS9498</a>
10	BR.Digital Provider	 X	<a href="#">AS14840</a>
11	ELETRONET S.A.	 X	<a href="#">AS267613</a>
12	CORE-BACKBONE	 X	<a href="#">AS33891</a>
13	COLT Technology Services Group Limited	 X	<a href="#">AS8220</a>
14	ch-ifog-1-mnt	 X	<a href="#">AS34927</a>
15	GSL Networks Pty LTD	 X	<a href="#">AS137409</a>
16	The Constant Company, LLC	 X	<a href="#">AS20473</a>
17	Adylnet Telecom	 X	<a href="#">AS28283</a>
18	Reliance Jio Infocomm Pte Ltd Singapore	 X	<a href="#">AS64049</a>
19	Summit Communications Ltd	 X	<a href="#">AS58717</a>
20	IP-ONLY-MNT	 X	<a href="#">AS12552</a>
21	CJSC RASCOM	 X	<a href="#">AS20764</a>
22	PJSC "Vimpelcom"	 X	<a href="#">AS3216</a>
23	PJSC MegaFon	 X	<a href="#">AS31133</a>
24	Inter.link GmbH	 X	<a href="#">AS5405</a>
25	NORDUnet	 X	<a href="#">AS2603</a>



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[http://bgp.he.net/AS12779#\\_whois](http://bgp.he.net/AS12779#_whois)

```
as-block:      AS12557 - AS13223
descr:         RIPE NCC ASN block
remarks:       These AS Numbers are assigned to network operators in the RIPE NCC service region.
mnt-by:        RIPE-NCC-HM-MNT
created:       2018-11-22T15:27:24Z
last-modified: 2018-11-22T15:27:24Z
source:        RIPE
```








# [http://bgp.he.net/AS12779#\\_irr](http://bgp.he.net/AS12779#_irr)

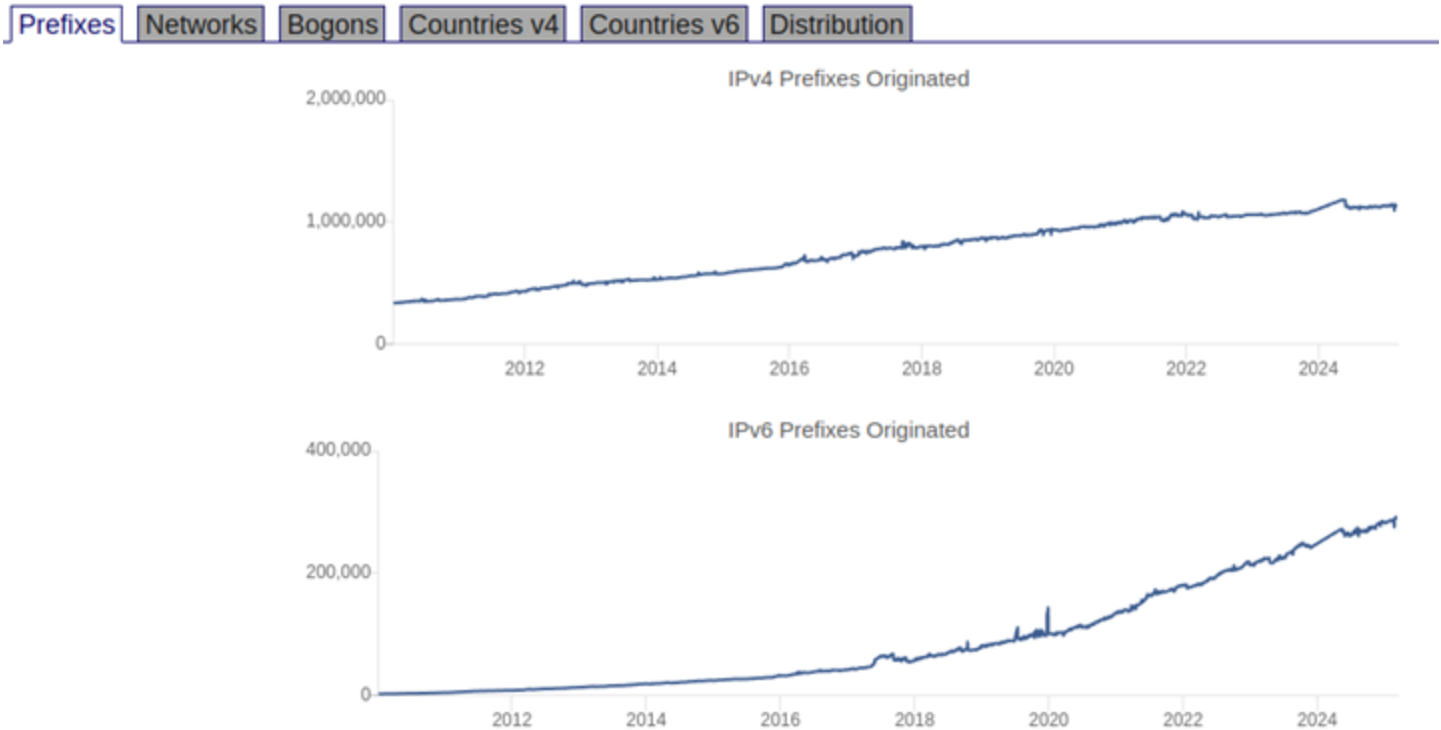
```
aut-num: AS12779
as-name: ITGATE
remarks: ++++++
remarks: We do not use RPSL to generate routers configurations and our
remarks: complete routing policy would be too much verbose anyway, so
remarks: this object does not precisely reflect the actual policy in
remarks: use in our network.
remarks: The following import and export attributes define only an
remarks: upper bound of what we accept or announce from neighbors and
remarks: should not be interpreted literally.
remarks: We document the ASN and prefixes announced to peers in the
remarks: AS12779:AS-CUSTOMERS and AS12779:AS-CUSTOMERS-V6 as-sets
remarks: and we generate prefix and/or as-path filters for our peers
remarks: and customers using the data published in the RIPE routing
remarks: registry as much as feasible.
remarks: ++++++
import: from AS-ANY accept ANY;
export: { to AS-ANY announce AS12779:AS-CUSTOMERS; } refine { to AS12779:AS-DOWNSTREAMS announce ANY; }
remarks: *
mp-import: afi ipv4.unicast from AS-ANY accept ANY;
mp-export: afi ipv4.unicast { to AS-ANY announce AS12779:AS-CUSTOMERS; } refine { to AS12779:AS-DOWNSTREAMS announce ANY; }
remarks: +
mp-import: afi ipv4.multicast from AS-ANY accept ANY;
mp-export: afi ipv4.multicast { to AS-ANY announce AS12779:AS-CUSTOMERS; } refine { to AS12779:AS-DOWNSTREAMS announce ANY; }
remarks: +
mp-import: afi ipv6.unicast from AS-ANY accept ANY;
mp-export: afi ipv6.unicast { to AS-ANY announce AS12779:AS-CUSTOMERS-V6; } refine { to AS12779:AS-DOWNSTREAMS-V6 announce ANY; }
remarks: +
remarks: +++ Configuration for the AMS-IX route servers ++++++
remarks: +
import-via: AS6777 from AS-ANY EXCEPT AS12779:AS-AMS-IX-FILTER accept ANY
export-via: afi ipv4.unicast AS6777 to AS-ANY EXCEPT AS12779:AS-AMS-IX-FILTER announce AS12779:AS-CUSTOMERS
export-via: afi ipv6.unicast AS6777 to AS-ANY EXCEPT AS12779:AS-AMS-IX-FILTER announce AS12779:AS-CUSTOMERS-V6
remarks: +
remarks: ++++++
remarks: ++++++
org: ORG-INS2-RIPE
admin-c: GDC15-RIPE
tech-c: ITGA1-RIPE
status: ASSIGNED
mnt-by: RIPE-NCC-END-MNT
remarks: ++++++
remarks: contact for operational issues.: noc@ncc.itgate.net
remarks: contact for peering requests...: peering@ncc.itgate.net
remarks: contact for security issues...: abuse@itgate.net
remarks: Peering info: http://as12779.peeringdb.com
remarks: ++++++
mnt-by: ITGATE-NCC
created: 2002-09-17T13:41:17Z
last-modified: 2016-04-14T08:31:51Z
source: RIPE
```



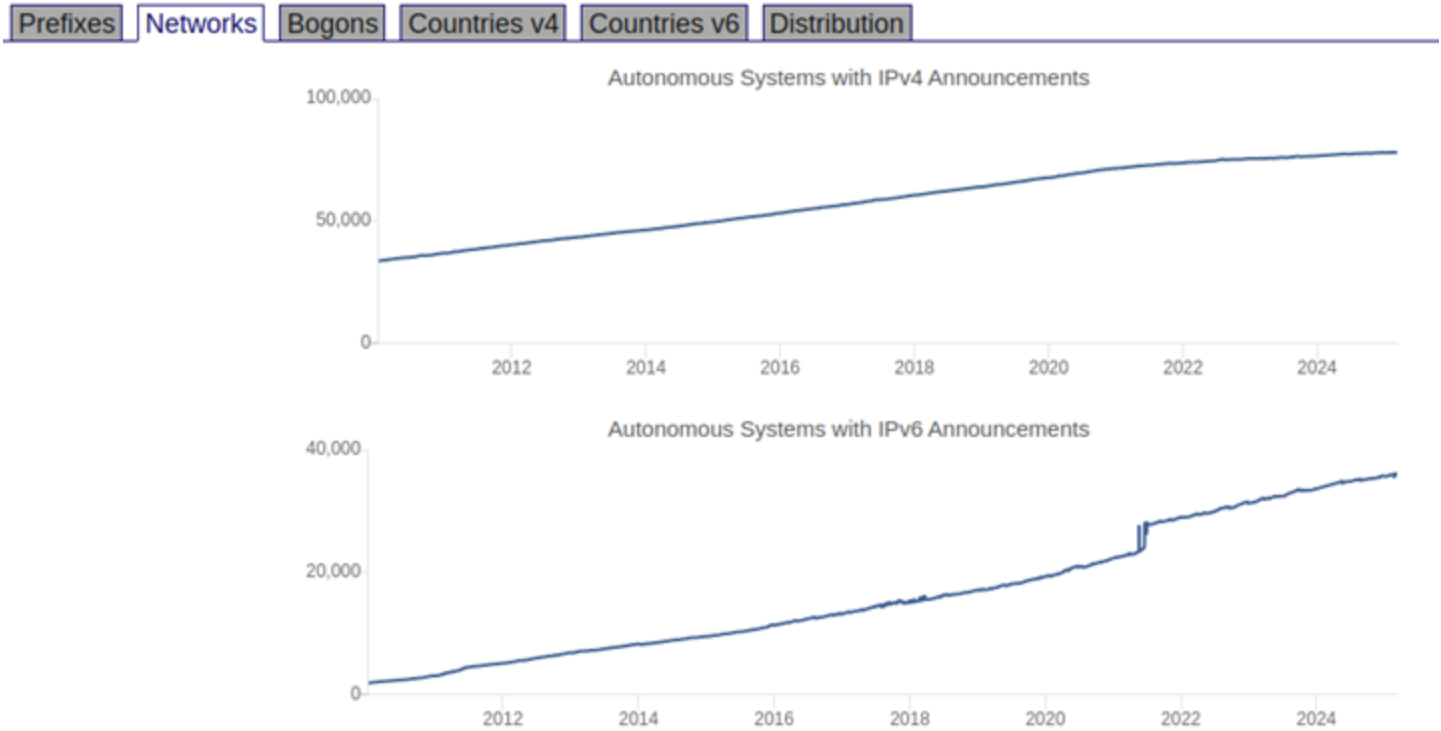
[http://bgp.he.net/AS12779#\\_ix](http://bgp.he.net/AS12779#_ix)

Exchange		CC	City	IPv4	IPv6
<a href="#">AMS-IX</a>		NL	Amsterdam	80.249.209.17	2001:7f8:1::a501:2779:1
<a href="#">DE-CIX Frankfurt</a>		DE	Frankfurt	80.81.194.186	2001:7f8::31eb:0:1
<a href="#">DE-CIX Marseille</a>		FR	Marseille	185.1.47.78	2001:7f8:36::31eb:0:1
<a href="#">France-IX</a>		FR	Paris	37.49.236.177	2001:7f8:54::177
<a href="#">France-IX AURA</a>		FR	Lyon	77.95.71.201	2001:7f8:47:47::c9
<a href="#">LINX LON1</a>		GB	London	195.66.226.31	2001:7f8:4::31eb:1
<a href="#">MINAP</a>		IT	Milan	185.1.114.12	2001:7f8:c5::a501:2779:1
<a href="#">MIX-IT</a>		IT	Milan	217.29.66.65 217.29.67.194	2001:7f8:b:100:1d1:a5d1:2779:194 2001:7f8:b:100:1d1:a5d1:2779:65
<a href="#">NaMeX</a>		IT	Rome	193.201.28.34	2001:7f8:10::1:2779
<a href="#">TOP-IX</a>		IT	Turin	194.116.96.4	2001:7f8:23:fff:3

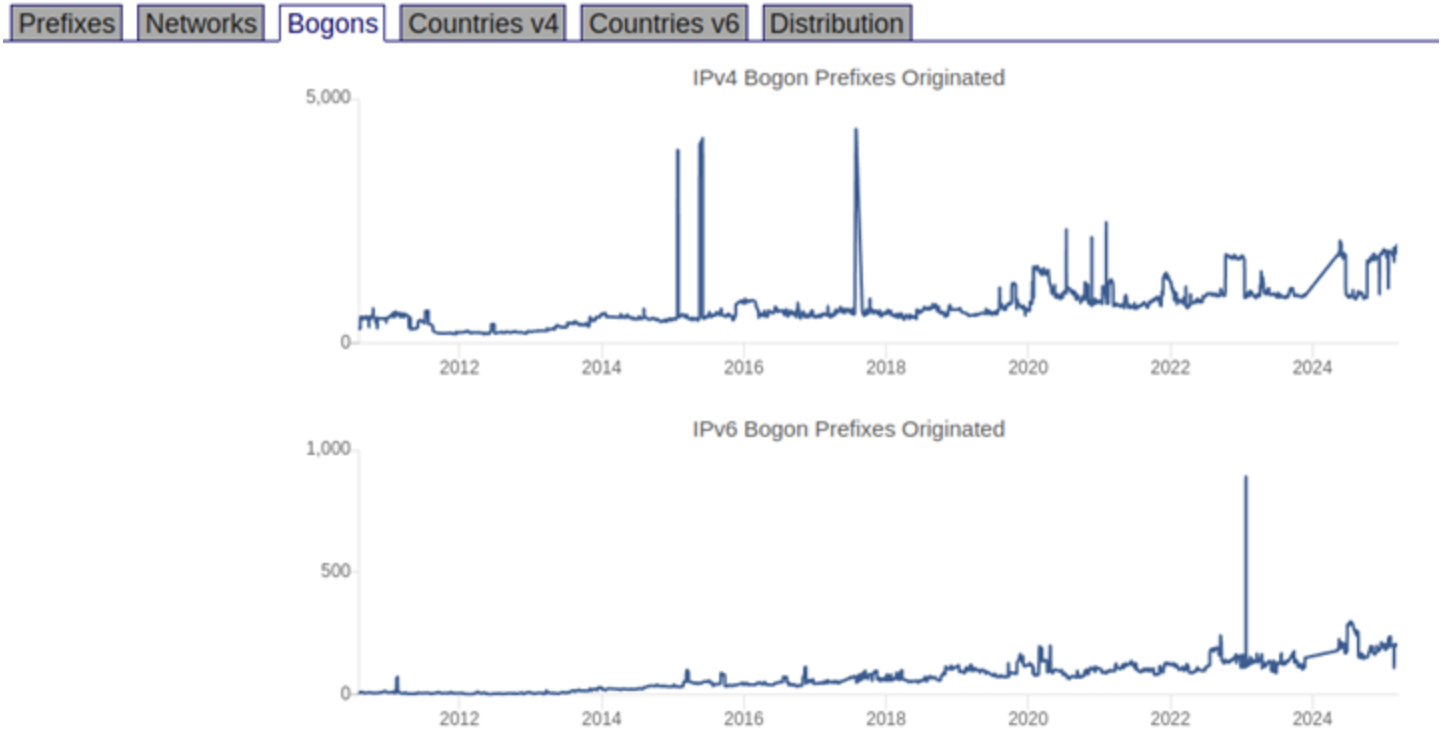
[https://bgp.he.net/report/prefixes#\\_prefixes](https://bgp.he.net/report/prefixes#_prefixes)



[https://bgp.he.net/report/prefixes#\\_networks](https://bgp.he.net/report/prefixes#_networks)














[https://bgp.he.net/report/prefixes#\\_bogons](https://bgp.he.net/report/prefixes#_bogons)



[http://bgp.he.net/report/prefixes#\\_countriesv4](http://bgp.he.net/report/prefixes#_countriesv4)

Prefixes Networks Bogons Countries v4 Countries v6 Distribution







IPv4 Announcements by Country

Country	Prefixes	ASNs	Prefixes / ASN
United States 	293,516	21,673	13
Brazil 	69,766	7,920	8
China 	55,677	839	66
India 	49,373	2,911	16
Russian Federation 	41,076	4,699	8
Germany 	33,287	2,729	12
Spain 	33,090	1,240	26
Mexico 	25,279	456	55
Canada 	23,619	1,907	12
Turkey 	22,282	768	29
Korea, Republic of 	21,346	870	24

[http://bgp.he.net/report/prefixes#\\_countriesv6](http://bgp.he.net/report/prefixes#_countriesv6)

Prefixes Networks Bogons Countries v4 Countries v6 Distribution

IPv6 Announcements by Country

Country	Prefixes	ASNs	Prefixes / ASN
United States 	52,989	5,398	9
China 	42,219	4,900	8
Brazil 	32,783	7,256	4
India 	20,270	1,072	18
Mexico 	8,692	255	34
Viet Nam 	8,587	247	34
Japan 	7,708	467	16
Germany 	6,462	1,738	3
Netherlands 	6,218	817	7
United Kingdom 	5,634	1,278	4
Bangladesh 	4,916	422	11



[http://bgp.he.net/report/prefixes#\\_distribution](http://bgp.he.net/report/prefixes#_distribution)

Prefixes Networks Bogons Countries v4 Countries v6 Distribution

**IPv4 Announced Prefix Count by CIDR and Growth over 5547 Days**

CIDR:	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Count:	17	18	43	94	319	600	1,271	2,281	14,668	8,995	15,420	26,813	48,535	59,083	126,087	121,583	705,287
Change:	7	8	18	29	135	214	609	1,038	3,573	3,663	6,257	7,700	24,656	35,313	95,530	91,407	528,775
Percent:	70%	80%	72%	44%	73%	55%	91%	83%	32%	68%	68%	40%	103%	148%	312%	302%	299%

**IPv6 Announced Prefix Count by CIDR and Growth over 5547 Days**

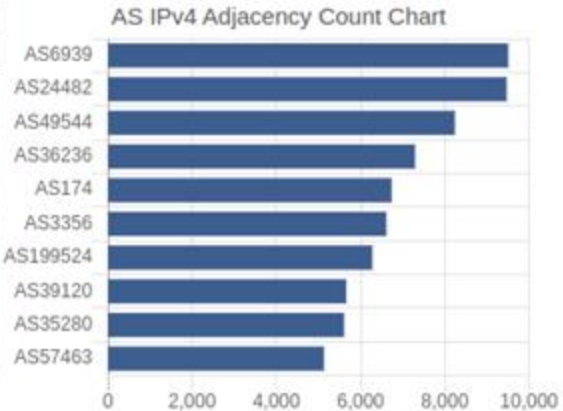
CIDR:	16	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Count:	4	1	13	3	6	9	37	12	20	21	162	5,463	752	357	34,553
Change:	1	0	9	0	3	8	36	11	15	18	155	5,462	750	354	32,958
Percent:	33%	0%	225%	0%	100%	800%	3600%	1100%	300%	600%	2214%	546200%	37500%	11800%	2066%



# <http://bgp.he.net/report/peers>

Adjacencies Adjacency History Prefixes Prefix History IPv4 Addresses Originated

IPv4 Adjacencies		
ASN	Name	Count
<a href="#">AS6939</a>	<a href="#">Hurricane Electric LLC</a>	9,506
<a href="#">AS24482</a>	<a href="#">SG.GS</a>	9,468
<a href="#">AS49544</a>	<a href="#">i3D.net B.V</a>	8,238
<a href="#">AS36236</a>	<a href="#">NetActuate, Inc</a>	7,293
<a href="#">AS174</a>	<a href="#">Cogent Communications</a>	6,738
<a href="#">AS3356</a>	<a href="#">Level 3 Parent, LLC</a>	6,612
<a href="#">AS199524</a>	<a href="#">G-Core Labs S.A.</a>	6,278
<a href="#">AS39120</a>	<a href="#">Convergenze S.p.A.</a>	5,659
<a href="#">AS35280</a>	<a href="#">F5 Networks SARL</a>	5,608
<a href="#">AS57463</a>	<a href="#">NetIX Communications JSC</a>	5,130



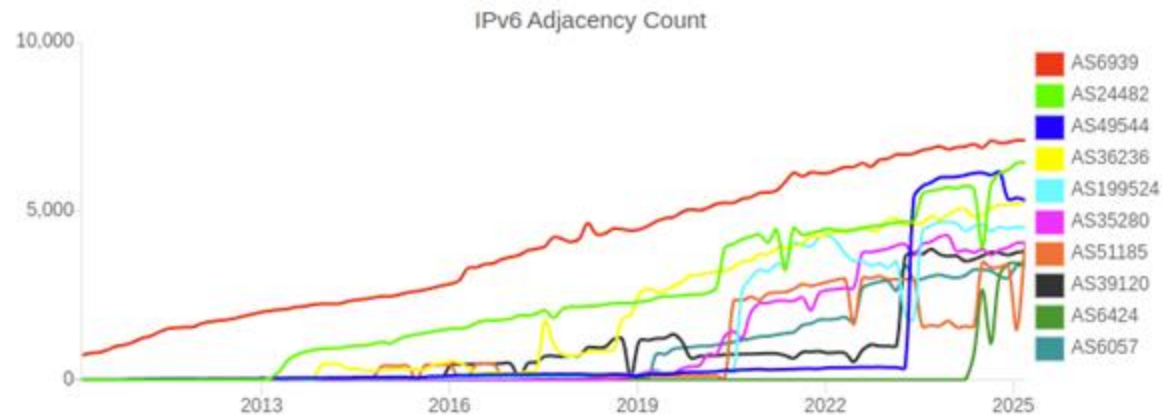
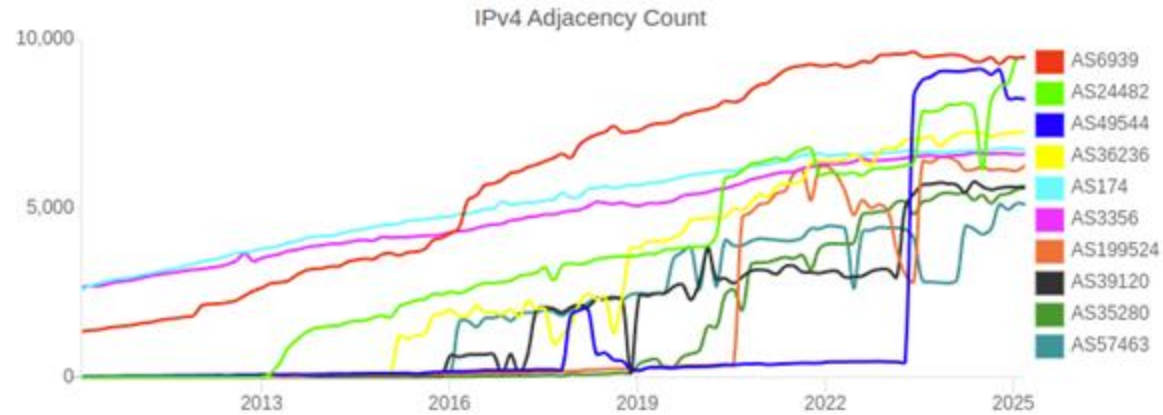
IPv6 Adjacencies		
ASN	Name	Count
<a href="#">AS6939</a>	<a href="#">Hurricane Electric LLC</a>	7,090
<a href="#">AS24482</a>	<a href="#">SG.GS</a>	6,434
<a href="#">AS49544</a>	<a href="#">i3D.net B.V</a>	5,331
<a href="#">AS36236</a>	<a href="#">NetActuate, Inc</a>	5,230
<a href="#">AS199524</a>	<a href="#">G-Core Labs S.A.</a>	4,513
<a href="#">AS35280</a>	<a href="#">F5 Networks SARL</a>	4,064
<a href="#">AS51185</a>	<a href="#">MainStreaming SpA</a>	4,039
<a href="#">AS39120</a>	<a href="#">Convergenze S.p.A.</a>	3,811
<a href="#">AS6424</a>	<a href="#">RIPE Network Coordination Centre</a>	3,467
<a href="#">AS6057</a>	<a href="#">Administracion Nacional de Telecomunicaciones</a>	3,378



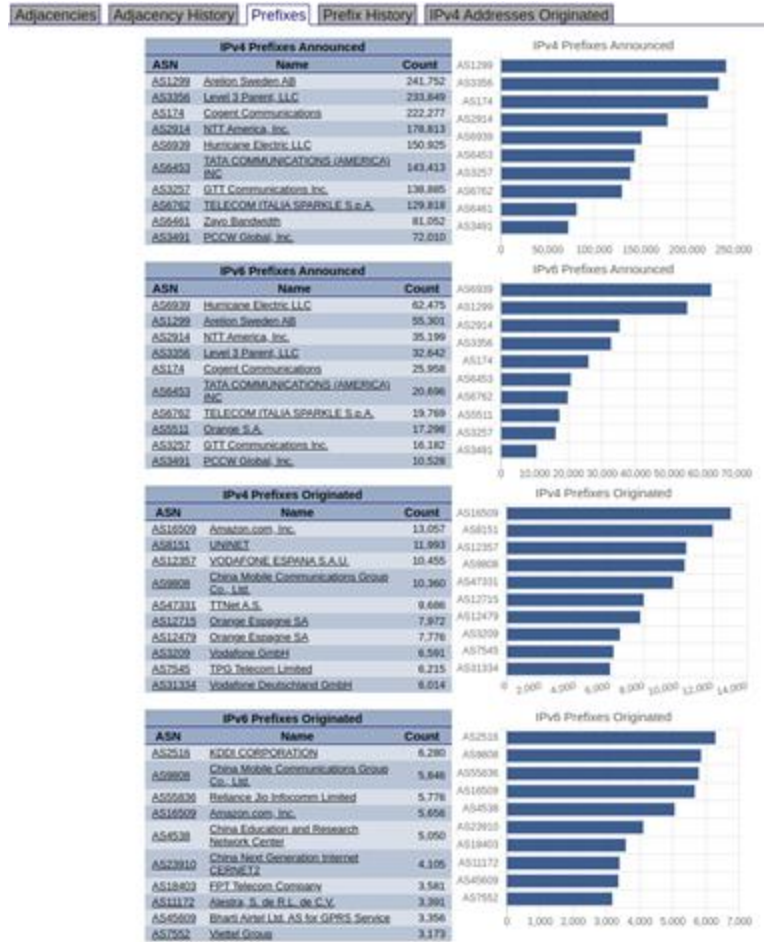


[http://bgp.he.net/report/peers#\\_adjacencyhistory](http://bgp.he.net/report/peers#_adjacencyhistory)

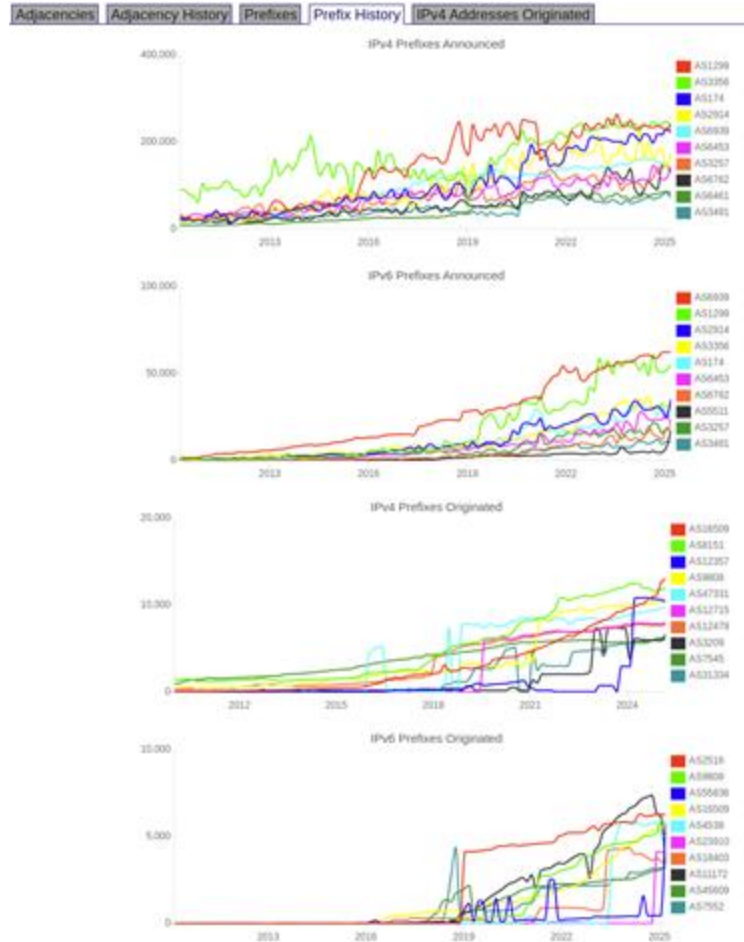
Adjacencies | Adjacency History | Prefixes | Prefix History | IPv4 Addresses Originated



# [http://bgp.he.net/report/peers#\\_prefixes](http://bgp.he.net/report/peers#_prefixes)



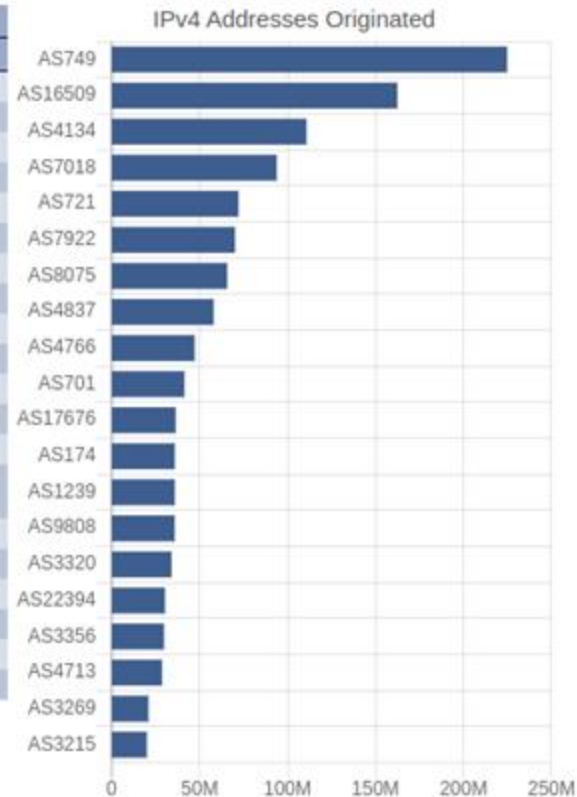
[http://bgp.he.net/report/peers#\\_prefixhistory](http://bgp.he.net/report/peers#_prefixhistory)



[http://bgp.he.net/report/peers#\\_ipv4addresses](http://bgp.he.net/report/peers#_ipv4addresses)











Adjacencies Adjacency History Prefixes Prefix History IPv4 Addresses Originated

IPv4 Addresses Originated		
ASN	Name	Count
AS749	DoD Network Information Center	224.8M
AS16509	Amazon.com, Inc.	162.4M
AS4134	China Telecom Backbone	110.7M
AS7018	AT&T Services, Inc.	93.8M
AS721	DoD Network Information Center	72.1M
AS7922	Comcast Cable Communications, LLC	70.1M
AS8075	Microsoft Corporation	65.7M
AS4837	China Unicom Backbone	58.0M
AS4766	Korea Telecom	47.2M
AS701	Verizon Business/UUnet	41.4M
AS17676	SoftBank Corp.	36.4M
AS174	Cogent Communications	35.9M
AS1239	Sprint	35.9M
AS9808	China Mobile Communications Group Co., Ltd.	35.9M
AS3320	Deutsche Telekom AG	34.1M
AS22394	Verizon Business	30.3M
AS3356	Level 3 Parent, LLC	29.8M
AS4713	NTT Communications Corporation	28.7M
AS3269	Telecom Italia S.p.A.	20.9M
AS3215	Orange S.A.	20.0M



# <http://bgp.he.net/report/exchanges>

Internet Exchanges Exchange Participants

Internet Exchange		Members	Data	CC	City	Website
<a href="#">PTT São Paulo</a>		2,820	✘	BR	São Paulo	<a href="http://ix.br">ix.br</a>
<a href="#">DE-CIX Frankfurt</a>		1,102	✔	DE	Frankfurt	<a href="http://www.de-cix.net">www.de-cix.net</a>
<a href="#">PTT Fortaleza</a>		1,043	✘	BR	Fortaleza	<a href="http://ix.br">ix.br</a>
<a href="#">LINX LON1</a>		932	⚠	GB	London	<a href="http://www.linx.net">www.linx.net</a>
<a href="#">4b42 Internet Exchange Point</a>		916	✔	CH	Zurich	<a href="http://www.4ixp.com">www.4ixp.com</a>
<a href="#">AMS-IX</a>		873	✔	NL	Amsterdam	<a href="http://www.ams-ix.net">www.ams-ix.net</a>
<a href="#">PTT Rio de Janeiro</a>		787	✘	BR	Rio de Janeiro	<a href="http://ix.br">ix.br</a>
<a href="#">IIX</a>		679	✘	ID	Jakarta	<a href="http://lix.net.id">lix.net.id</a>
<a href="#">GNM-IX</a>		669	✘	NL	Amsterdam	<a href="http://gnm-ix.net">gnm-ix.net</a>
<a href="#">NL-IX</a>		663	✔	NL	Amsterdam	<a href="http://www.nl-ix.net">www.nl-ix.net</a>

[http://bgp.he.net/report/exchanges#\\_participants](http://bgp.he.net/report/exchanges#_participants)

Internet Exchanges

Exchange Participants

IX Participation Count		
ASN	Name	IXes
<a href="#">AS13335</a>	<a href="#">Cloudflare, Inc.</a>	341
<a href="#">AS42</a>	<a href="#">WoodyNet, Inc.</a>	325
<a href="#">AS6939</a>	<a href="#">Hurricane Electric LLC</a>	322
<a href="#">AS3856</a>	<a href="#">Packet Clearing House, Inc.</a>	315
<a href="#">AS20940</a>	<a href="#">Akamai International B.V.</a>	231
<a href="#">AS15169</a>	<a href="#">Google LLC</a>	219
<a href="#">AS32934</a>	<a href="#">Facebook, Inc.</a>	218
<a href="#">AS8075</a>	<a href="#">Microsoft Corporation</a>	202
<a href="#">AS16509</a>	<a href="#">Amazon.com, Inc.</a>	165
<a href="#">AS54113</a>	<a href="#">Fastly, Inc.</a>	143
<a href="#">AS112</a>	<a href="#">DNS-OARC</a>	134
<a href="#">AS55256</a>	<a href="#">Netskope Inc</a>	128
<a href="#">AS199524</a>	<a href="#">G-Core Labs S.A.</a>	121
<a href="#">AS2906</a>	<a href="#">Netflix Streaming Services Inc.</a>	111
<a href="#">AS49544</a>	<a href="#">i3D.net B.V</a>	108
<a href="#">AS212232</a>	<a href="#">Port 179 LTD</a>	101
<a href="#">AS24482</a>	<a href="#">SG.GS</a>	99
<a href="#">AS6507</a>	<a href="#">Riot Games, Inc</a>	96
<a href="#">AS8674</a>	<a href="#">Netnod AB</a>	94
<a href="#">AS10310</a>	<a href="#">Oath Holdings Inc.</a>	92





[http://bgp.he.net/report/bogons#\\_bogons](http://bgp.he.net/report/bogons#_bogons)

Bogons

IPv4 by Origin

IPv6 by Origin

IPv4 by Prefix

IPv6 by Prefix



[http://bgp.he.net/report/bogons#\\_bogonsv4asn](http://bgp.he.net/report/bogons#_bogonsv4asn)

Bogons IPv4 by Origin IPv6 by Origin IPv4 by Prefix IPv6 by Prefix

ASN	Name	Prefixes
<a href="#">AS51</a>	Headquarters, USAISC	<a href="#">103.218.227.0/24</a> -> unallocated
<a href="#">AS174</a>	Cogent Communications	<a href="#">23.159.56.0/24</a> -> unallocated <a href="#">169.128.236.0/23</a> -> unallocated
<a href="#">AS702</a>	Verizon Business/UUnet Europe	<a href="#">193.96.0.0/13</a> -> unallocated <a href="#">194.139.0.0/16</a> -> unallocated <a href="#">194.172.0.0/14</a> -> unallocated
<a href="#">AS721</a>	DoD Network Information Center	<a href="#">198.97.240.0/20</a> -> unallocated <a href="#">199.123.16.0/20</a> -> unallocated
<a href="#">AS812</a>	Rogers Communications Canada Inc.	<a href="#">216.176.216.0/21</a> -> unallocated
<a href="#">AS906</a>	DMIT Cloud Services	<a href="#">100.69.1.0/24</a> -> RFC6598 <a href="#">100.70.0.0/16</a> -> RFC6598
<a href="#">AS999</a>	CORIX NETWORKS	<a href="#">172.17.100.0/24</a> -> RFC1918
<a href="#">AS1221</a>	Telstra Limited	<a href="#">203.28.190.0/24</a> -> unallocated <a href="#">203.28.228.0/24</a> -> unallocated
<a href="#">AS1239</a>	Sprint	<a href="#">23.159.56.0/24</a> -> unallocated <a href="#">169.128.236.0/23</a> -> unallocated
<a href="#">AS1277</a>		<a href="#">74.116.52.0/24</a> -> unallocated
<a href="#">AS1851</a>	The University of Adelaide	<a href="#">203.9.156.0/24</a> -> unallocated





# https://bgp.he.net/AS1851

AS Info Graph v4 Graph v6 Prefixes v4 Prefixes v6 Peers v4 Peers v6 Whois RDAP IRR Traceroute

AS1851 announces bogons.

Country of Origin:

Australia



Prefixes Originated (all): 10  
Prefixes Originated (v4): 9  
Prefixes Originated (v6): 1

Prefixes Announced (all): 10  
Prefixes Announced (v4): 9  
Prefixes Announced (v6): 1

RPKI Originated Valid (all): 8  
RPKI Originated Valid (v4): 7  
RPKI Originated Valid (v6): 1

RPKI Originated Invalid (all): 1  
RPKI Originated Invalid (v4): 1  
RPKI Originated Invalid (v6): 0

BGP Peers Observed (all): 2  
BGP Peers Observed (v4): 1  
BGP Peers Observed (v6): 2

IPs Originated (v4): 69,888  
AS Paths Observed (v4): 587  
AS Paths Observed (v6): 447

Average AS Path Length (all): 4.246  
Average AS Path Length (v4): 4.414  
Average AS Path Length (v6): 4.025

AS1851 IPv4 Peers



AS7575

AS1851 IPv6 Peers



AS7474

AS7575
















ASN	Name
AS7575	Australian Academic and Research Network

ASN	Name
AS7575	Australian Academic and Research Network
AS7474	SingTel Optus Pty Ltd

# <http://bgp.he.net/report/world>

## Countries

### Countries with ASNs: 241

Description	CC	ASNs	Report
United States 	US	32,192	<a href="#">Report</a>
Brazil 	BR	10,464	<a href="#">Report</a>
China 	CN	6,857	<a href="#">Report</a>
Russian Federation 	RU	6,671	<a href="#">Report</a>
India 	IN	6,017	<a href="#">Report</a>
United Kingdom 	GB	3,904	<a href="#">Report</a>
Indonesia 	ID	3,589	<a href="#">Report</a>
Germany 	DE	3,562	<a href="#">Report</a>
Australia 	AU	3,136	<a href="#">Report</a>
Poland 	PL	2,772	<a href="#">Report</a>
Canada 	CA	2,514	<a href="#">Report</a>
Ukraine 	UA	2,356	<a href="#">Report</a>
France 	FR	2,270	<a href="#">Report</a>
Bangladesh 	BD	1,927	<a href="#">Report</a>
Netherlands 	NL	1,784	<a href="#">Report</a>

# <http://bgp.he.net/country/PH>

Country Info

Networks: Philippines 

ASN	Name	Adjacencies v4	Routes v4	Adjacencies v6	Routes v6
<a href="#">AS17639</a>	Converge ICT Solutions Inc.	1,760	842	1,519	56
<a href="#">AS142271</a>	EWS DS Networks Inc	1,121	4	512	2
<a href="#">AS150000</a>	Data-Beam Business Solution	1,021	9	1,135	1
<a href="#">AS140984</a>	WTW HIGHTECH COMPANY INC	542	2	617	1
<a href="#">AS4775</a>	Globe Telecoms	419	1,419	233	341
<a href="#">AS18187</a>	Source Telecoms Inc.	409	22	58	2
<a href="#">AS135607</a>	Infinivan Incorporated	375	596	187	59
<a href="#">AS9299</a>	Philippine Long Distance Telephone Company	257	771	75	12
<a href="#">AS9658</a>	Eastern Telecoms Phils., Inc.	228	580	49	2
<a href="#">AS55821</a>	RADIUS TELECOMS, INC.	96	137	51	27



# <https://bgp.he.net/report/multioriginroutes>

<a href="#">74.200.186.0/24</a>	LEARN	<a href="#">AS13359</a> , <a href="#">AS14085</a> , <a href="#">AS16905</a> , <a href="#">AS22645</a>
<a href="#">80.66.127.0/24</a>	LYNTIA NETWORKS SA NOC & CUSTOMERS	<a href="#">AS8903</a> , <a href="#">AS12541</a> , <a href="#">AS202349</a> , <a href="#">AS202766</a>
<a href="#">80.81.192.0/21</a>	DE-CIX Management GmbH	<a href="#">AS6730</a> , <a href="#">AS12969</a> , <a href="#">AS36994</a> , <a href="#">AS37497</a>
<a href="#">80.249.208.0/21</a>	Amsterdam Internet Exchange B.V.	<a href="#">AS7713</a> , <a href="#">AS12969</a> , <a href="#">AS13194</a> , <a href="#">AS37497</a>
<a href="#">103.181.150.0/24</a>	VEDIMANTRA LIFECARE PRIVATE LIMITED	<a href="#">AS54339</a> , <a href="#">AS133296</a> , <a href="#">AS133661</a> , <a href="#">AS151106</a>
<a href="#">185.238.172.0/24</a>	DIDWW Ireland Limited	<a href="#">AS51865</a> , <a href="#">AS199170</a> , <a href="#">AS207319</a> , <a href="#">AS212893</a>
<a href="#">193.239.116.0/22</a>	Broadband Hosting B.V.	<a href="#">AS7713</a> , <a href="#">AS9498</a> , <a href="#">AS13194</a> , <a href="#">AS204092</a>
<a href="#">196.60.96.0/23</a>	JINX Peering	<a href="#">AS11845</a> , <a href="#">AS37053</a> , <a href="#">AS37497</a> , <a href="#">AS58453</a> , <a href="#">AS328206</a>
<a href="#">196.223.22.0/23</a>	ISPA SA	<a href="#">AS11845</a> , <a href="#">AS36994</a> , <a href="#">AS37053</a> , <a href="#">AS37497</a>
<a href="#">196.223.30.0/23</a>		<a href="#">AS11845</a> , <a href="#">AS36994</a> , <a href="#">AS37497</a> , <a href="#">AS327782</a>
<a href="#">204.225.142.0/24</a>	Disney Worldwide Services, Inc.	<a href="#">AS25932</a> , <a href="#">AS29736</a> , <a href="#">AS30311</a> , <a href="#">AS40051</a>
<a href="#">206.72.210.0/23</a>	CoreSite	<a href="#">AS7029</a> , <a href="#">AS7713</a> , <a href="#">AS9009</a> , <a href="#">AS25892</a>
<a href="#">2.59.118.0/24</a>	BELERAFON, razvoj in programiranje, d.o.o.	<a href="#">AS41436</a> , <a href="#">AS204548</a> , <a href="#">AS210329</a>
<a href="#">5.180.140.0/22</a>	Dustin NL B.V.	<a href="#">AS50319</a> , <a href="#">AS204922</a> , <a href="#">AS205198</a>
<a href="#">23.19.196.0/24</a>	LeaseWeb Global Services BV (C07344729)	<a href="#">AS7203</a> , <a href="#">AS28753</a> , <a href="#">AS30633</a> , <a href="#">AS59253</a> , <a href="#">AS60781</a>
<a href="#">23.19.197.0/24</a>	LeaseWeb Global Services BV (C07344730)	<a href="#">AS7203</a> , <a href="#">AS28753</a> , <a href="#">AS30633</a> , <a href="#">AS59253</a> , <a href="#">AS60781</a>

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# Key closing points

- Your view depends on where you stand
- Routers propagate the best path only
- It is important to understand the full view thus you must understand the reverse path.
  
- Participate with public collectors via route-views to help improve our data

Thanks!

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